

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A mobile telecommunications network including:

\_\_\_\_\_ a plurality of base station systems ~~(10)~~ adapted ~~arranged~~ to communicate with a mobile terminal ~~(1)~~ over a predetermined licensed radio interface and switching centers ~~(202)~~ connected to a plurality of said base station systems ~~(10)~~, wherein each switching center ~~(202)~~ and the base station systems ~~(10)~~ connected thereto share a location area identity, said base station systems ~~(10)~~ being adapted to communicate information indicative of said location area identity to a mobile terminal ~~(1)~~,

wherein characterised in that said network further includes at least two unlicensed-radio access networks, each comprising an access ~~point~~ network controller ~~(303)~~ connected to one of said switching centers ~~(202)~~, multiple access points ~~(303)~~ adapted to communicate with said mobile terminal ~~(1)~~ via an unlicensed-radio interface ~~[[,]]~~ and a ~~fixed~~ broadband network ~~(302)~~ connecting said plurality of access points ~~(301)~~ with said access network controllers ~~(303)~~ and a lookup table mapping a location area identity with address information for an access ~~point~~ network controller ~~(303)~~ on said ~~fixed~~ broadband network ~~(302)~~, and

\_\_\_\_\_ wherein each said access point is arranged to connect a mobile terminal with a default access network controller, said default access network controller being adapted to receive a request from said mobile terminal containing ~~each said access point is adapted to~~ information indicative of a last location area received by said mobile terminal, to submit a request to said lookup table containing said location area information, to receive address information from said lookup table for an access network controller mapped to said location area in response to said

request, and to transmit said address information to said mobile terminal via said access point,  
~~receive from said mobile station information indicative of a last received location area, to~~  
~~receive from said lookup table address information for an access point controller (303) mapped~~  
~~to said address information enabling said mobile terminal said location identity and to establish a~~  
connection with said addressed access ~~point~~ network controller (303) via said access point and  
said fixed ~~fixed~~ broadband network.

2. Canceled.

3. Canceled.

4. Canceled.

5. (Currently Amended) A network as claimed in claim 1, ~~characterised in that~~ wherein said  
mobile terminal is adapted to store at least part of said lookup table (40) ~~is stored in said~~  
~~access point.~~

6. (Currently Amended) A network as claimed in claim 1, ~~characterised in that~~ wherein said  
default access network controller is adapted to store at least part of said lookup table (40) ~~is~~  
~~stored in an access point controller (303) connected by default to said access point (301).~~

7. (Currently Amended) A network as claimed in claim 1, ~~characterised in that~~ wherein said  
~~fixed~~ broadband network is an internet protocol based network and said address is an internet

protocol address.

8. (Currently Amended) An unlicensed-radio access system connected to a core network

portion of a licensed mobile network, said unlicensed-radio access system including:

a plurality of access points ~~(301)~~ adapted to communicate with mobile stations ~~(1)~~ over an unlicensed-radio interface, a plurality of access ~~point~~-network controllers ~~(303)~~ connected to said core network portion ~~(20)~~ and a ~~fixed~~-broadband network ~~(302)~~ connected to both said access points ~~(301)~~ and said access ~~point~~-network controllers ~~(303)~~,

~~characterised in that~~ wherein each said access ~~point~~-network controller ~~(303)~~ is associated with a location area in said licensed radio mobile network,

said system furthermore being provided with at least one lookup table containing information mapping location areas to address information of access ~~point~~-network controllers ~~(303)~~ on said ~~fixed~~-broadband network ~~(302)~~,

wherein each access point ~~(301)~~ is ~~adapted~~ arranged to receive from a mobile station information indicative of a location area corresponding to a portion of said licensed mobile network, to obtain from said lookup table address information of an access ~~point~~-network controller ~~(303)~~ on said ~~fixed~~-broadband network ~~(302)~~ associated with said location area information, and to establish a connection with said addressed access ~~point~~-network controller ~~(303)~~ via said ~~fixed~~-broadband network.

9. (Currently Amended) A system as claimed in claim 8, ~~characterised in that~~ wherein said lookup table is comprised in a database server located on said ~~fixed~~-broadband network ~~(302)~~.

10. (Currently Amended) A system as claimed in claim 8, ~~further characterised in that~~ wherein  
said access points are arranged to store at least part of the data in said lookup table ~~is stored~~  
~~in said access points.~~
11. (Currently Amended) A system as claimed in ~~claim~~ claims 8 or 9, ~~characterised in that~~  
wherein said fixed broadband network is an internet protocol based network and said address  
is an internet protocol address.
12. (Currently Amended) A system as claimed in claim 8, ~~characterised in that~~ wherein each  
access point ~~(301)~~ is connected for communication with a default access ~~point~~ network  
controller ~~(303)~~, wherein the access points are ~~adapted~~ arranged to connect to a different  
access ~~point~~ network controller ~~(303)~~ if the information indicative of a location area does not  
correspond to the ~~fixed~~ broadband network address of said default access ~~point~~ network  
controller ~~(303)~~.
13. (Currently Amended) A method for establishing a connection between a mobile station  
terminal and a core network portion of a mobile communications network via an unlicensed-  
radio access network, said mobile communications network comprising:  
\_\_\_\_\_ access portions including base stations ~~(10)~~ and switching control parts ~~(202)~~ connected  
to said base stations, each switching control part ~~(202)~~ sharing a common location area identity  
with a plurality of said base stations and said base stations ~~(101)~~ being ~~adapted~~ arranged to  
communicate said location area identity to a mobile station terminal, said unlicensed-radio access

network (30) comprising at least one access point (103) ~~adapted~~ arranged to communicate with a mobile station (1) via an unlicensed-radio interface, at least one access network controller (303) each connected to a switching control part (202), a ~~fixed~~ broadband network (302) connected to said at least one access ~~point~~ network controller (303) and access point (103) and a lookup table containing data mapping a location area identity with an address of one of said access network controllers (303) on said ~~fixed~~ broadband network (302), said method including the steps of:

a default access network controller receiving information indicative of a location area identity from a mobile terminal via an access point;

said default access network controller submitting a request to said lookup table using said location area identity information;

receiving from said lookup table an address on said broadband access network of an access network controller associated with said location area identity; and

relaying said address to said mobile terminal via said access point to enable said mobile terminal ~~said access point (301) receiving from said mobile station information indicative of a location area identity;~~

~~receiving from said lookup table the address of an access point controller (303) associated with said location area identity;~~

~~establishing to establish~~ a connection with said addressed access ~~point~~ network controller via said access point and ~~fixed~~ broadband network ~~to enable communication between said mobile station and said core network.~~

14. Canceled.

15. Canceled.

16. (Currently Amended) A method in an unlicensed radio access network for assigning and connecting access points ~~(301)~~ to an access ~~point~~network controller ~~(303)~~, said unlicensed radio access network including a plurality of access points ~~(301)~~ a plurality of access controllers ~~(303)~~ connected to a licensed mobile core network ~~(20)~~ and a ~~fixed~~-broadband network connected to said access controllers and for connecting to said access points, and wherein each access ~~point~~network controller is associated with a location area of said licensed mobile network, said method including the steps of:

\_\_\_\_\_ receiving from said mobile station a location area indicator indicative of a location area of said licensed mobile network with which said mobile station was last in communication,

\_\_\_\_\_ retrieving ~~fixed~~-broadband network address information for an access point switching controller associated with said location area indicator, and

\_\_\_\_\_ connecting said access point to said retrieved broadband network address of said an access point switching controller to establish a connection.

17. (New) An unlicensed-radio access network controller connected to a core network portion of a licensed mobile network and to a plurality of access points via broadband network, wherein said access network controller is arranged to communicate with a lookup table containing information mapping location areas to address information for addressing access network controllers on said broadband network,

said access network controller being further arranged:

to serve a mobile terminal as a default access network controller, and

- to receive from said mobile terminal information indicative of a location area corresponding to a portion of said licensed mobile network,
  - to obtain from said lookup table address information of an access network controller on said broadband network associated with said location area information, and
  - to transmit said address information to said mobile station.